

Remarks/ArgumentsI. Status of the Claims

In the Office Action, the Examiner indicated that claims 1-26 are pending and rejected claims 1-26 (more particularly, claims 1, 3 and 13 are rejected under 35 U.S.C. §102(b), and claims 2, 4-12 and 14-26 are rejected under 35 U.S.C. §103(a)).

Claims 1-26 are pending for reconsideration.

II. Rejection of Claims 1, 3 and 13 under 35 U.S.C. §102(b)

At pages 2-3, item 5 of the Office Action, claims 1, 3 and 13 are rejected under 35 U.S.C. §102(b) as being anticipated by Taroda et al. (U.S. Patent No. 5,724,542).

This rejection is respectfully traversed to the extent that it is maintained.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). It is respectfully submitted that the Taroda et al. patent does not disclose (or even suggest) each and every element as set forth in the claims.

For example, the Taroda et al. patent fails to disclose (or even suggest) an apparatus for performing power fault analysis in a computer system, the computer system having a power system that includes a control device, wherein the power system receives utility power and applies power to at least one electrical component of the computer system, the apparatus comprising an information circuit associated with the power system, the information circuit having a non-volatile memory field for storing a state

variable, “the state variable assuming a first state when the computer system is powered on and operating, wherein the state variable stays in the first state until the computer system is powered off in response to a power-off request” and “the state variable assuming a second state when the computer system is powered off in response to a power-off request, wherein the state variable stays in the second state until the computer system is powered on and operating” as recited in independent claim 1.

Similarly, the Taroda et al. patent also fails to disclose (or even suggest) a computer-implemented method of performing power fault analysis in a computer system, the computer system having a power system that includes a control device, wherein the power system receives utility power and applies power to at least one electrical component of the computer system, the computer-implemented method comprising the step of storing a state variable in a non-volatile memory field of an information circuit associated with the power system, “the state variable assuming a first state when the computer system is powered on and operating, wherein the state variable stays in the first state until the computer system is powered off in response to a power-off request” and “the state variable assuming a second state when the computer system is powered off in response to a power-off request, wherein the state variable stays in the second state until the computer system is powered on and operating” as recited in independent claim 13.

In both of these independent claims, i.e., claims 1 and 13, the state variable assumes a particular state only when a specific condition or conditions occur and stays in that state until another specific condition or conditions occur. These claims require the state variable to assume a first state when the computer system is powered on and operating. In this regard, these claims specifically require the state variable to remain in the first state until the computer system is powered off in response to a power-off request. These claims also require the state variable to assume a second state when the computer

system is powered off in response to a power-off request. In this regard, these claims specifically require the state variable to remain in the second state until the computer system is powered on and operating.

These elements of the claimed invention are not disclosed (or even suggested) by the Taroda et al. patent. In regard to these elements, the rejection states that Taroda et al. teach "the state variable (OFF OK) assuming a first state when the computer is powered on and operating with figure 23, at column 20, lines 27-32 and at column 22, lines 1-8" and "the state variable (OFF OK) assuming a second state when the computer is powered off in response to a power off request at column 20, line 61 - column 21, line 41." Office Action, page 3, lines 6-11. However, the off-permission signal OK OFF in the Taroda et al. patent does not assume and maintain states based on the claimed conditions. Instead, in response to an inquiry to service adapters 36a, 36a' from unit power controllers 39a, 39a', the service adapters 36a, 36a' send off-permission signal OFF OK to the respective unit power controllers 39a, 39a' in a case where notification of write-back completion has been received from the cache function engines 34a, 34a', thereby giving notice of the fact that battery back-up is unnecessary. See, Taroda et al., col. 19, line 66 - col. 20, line 8. If notification of write-back completion has not been received, the service adapters 36a, 36a' do not send the off-permission signal OFF OK, thereby giving notice of the fact that battery back-up is necessary. See, Taroda et al., col. 20, lines 9-12. The unit power controllers 39a, 39a' input to battery unit 39c an off-permission signal OFF OK STATE indicating whether notification of the fact that battery back-up is unnecessary has been received from the service adapters 36a, 36a'. See, Taroda et al., col. 20, lines 18-26. Clearly, the conditions under which Taroda et al.'s off-permission signal OFF OK is sent or not sent, and Taroda et al.'s off-permission signal OFF OK STATE changes state, are completely different than the claimed conditions.

Moreover, in both of these independent claims, i.e., claims 1 and 13, the state variable is stored in a non-volatile memory field of an information circuit associated with the computer system's power system. These elements of the claimed invention are not disclosed (or even suggested) by the Taroda et al. patent. In regard to these elements, the rejection states that Taroda et al. teach "an information circuit having a non-volatile memory field for storing a state variable with the memory circuitry of BTU 39c of figure 22 and at column 20, lines 27-32". Office Action, page 3, lines 3-5. Granted, the Taroda et al. patent teaches that battery unit (BTU) 39c stores the off-permission signal OFF OK STATE (on/off). See, Taroda et al., col. 20, lines 27-32. However, the Taroda et al. patent does not disclose (or even suggest) that battery unit BTU 39 stores its state variable in a non-volatile memory field, much less a non-volatile memory field of an information circuit associated with a computer system's power system as required by each of independent claims 1 and 13.

Furthermore, because the Taroda et al. patent fails to disclose (or even suggest) the invention as recited in independent claim 1, the Applicants respectfully submit that dependent claim 3 (which depends directly from claim 1) also patentably defines over the prior art for at least the reasons discussed above with respect to claim 1.

Therefore, the Applicants respectfully request reconsideration and withdrawal of this rejection of claims 1, 3 and 13 under §102(b).

III. Rejections of Claims 2, 4-12 and 14-21 under 35 U.S.C. §103(a)

At pages 3-4, item 6 of the Office Action, claims 2, 6, 8, 10, 12, 16, 19 and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Taroda et al. (U.S. Patent No. 5,724,542) in view of Berglund et al. (U.S. Patent No. 6,055,581).

At pages 5-6, item 7 of the Office Action, claims 4, 5, 14 and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over Taroda et al. (U.S. Patent No. 5,724,542) in view of Mermelstein (U.S. Patent No. 6,052,793).

At page 6, item 8 of the Office Action, claims 7, 9, 11, 17, 18 and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Taroda et al. (U.S. Patent No. 5,724,542) in view of Johnson et al. (U.S. Patent No. 6,122,758).

These rejections are respectfully traversed to the extent that they are maintained.

It is respectfully submitted that the Taroda et al., Berglund et al., Mermelstein and Johnson et al. patents, alone and in combination, fail to disclose or suggest the claimed invention.

As discussed in the previous section, the primary reference to Taroda et al. fails to disclose or suggest the claimed invention as recited in independent claims 1 and 13. For example, the conditions under which Taroda et al.'s off-permission signal OFF OK is sent or not sent, and Taroda et al.'s off-permission signal OFF OK STATE changes state, are completely different than the claimed conditions set forth in independent claims 1 and 13. In addition, the Taroda et al. patent does not disclose or suggest that battery unit BTU 39 stores its state variable in a non-volatile memory field, much less a non-volatile memory field of an information circuit associated with a computer system's power system as required by each of independent claims 1 and 13. These deficiencies in the primary reference to Taroda et al. relative to independent claims 1 and 13 are not cured by the Berglund et al., Mermelstein and Johnson et al. patents, which are cited for alleged teachings with respect to other elements of the claimed invention.

Because the Taroda et al., Berglund et al., Mermelstein and Johnson et al. patents, alone and in combination, fail to disclose or suggest the invention as recited in independent claims 1 and 13, the Applicants respectfully submit that dependent claims 2 and 4-12 (which depend, directly or indirectly, from claim 1) and dependent claims 14-21 (which depend, directly or indirectly, from claim 13) also patentably define over the prior art for at least the reasons discussed above with respect to claims 1 and 13.

Also, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the primary reference to Taroda et al. or to combine the reference teachings as suggested by the Examiner. Moreover, there was no reasonable expectation of success in modifying the primary reference to Taroda et al. or combining the reference teachings as suggested by the Examiner. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In this case, neither the teaching/suggestion nor the reasonable expectation of success is found in the prior art. Instead, the Examiner appears to be using forbidden hindsight.

Therefore, the Applicants respectfully request reconsideration and withdrawal of these rejections of claims 2, 4-12 and 14-21 under §103(a).

IV. Rejections of Claims 22-26 under 35 U.S.C. §103(a)

At pages 7-8, item 9 of the Office Action, claims 22, 25 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Taroda et al. (U.S. Patent No. 5,724,542) in view of IBM TDB "Fault Indicator Software Support for Unattended Operational Personal Computer Systems).

At pages 8-9, item 10 of the Office Action, claims 23 and 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Taroda et al. (U.S. Patent No. 5,724,542) in view of IBM TDB “Fault Indicator Software Support for Unattended Operational Personal Computer Systems) and further in view of Mermelstein (U.S. Patent No. 6,052,793).

These rejections are respectfully traversed to the extent that they are maintained.

It is respectfully submitted that the Taroda et al. patent , the IBM TDB and the Mermelstein patent, alone and in combination, fail to disclose or suggest the claimed invention.

For example, the Taroda et al. patent, the IBM TDB and the Mermelstein patent, alone and in combination, fail to disclose or suggest a program product for performing power fault analysis in a computer system, the computer system having a power system that includes a control device, wherein the power system receives utility power and applies power to at least one electrical component of the computer system, the program product comprising a signal bearing media and a program recorded on the signal bearing media, the program being capable of executing on a processor and containing a variable, “the variable being in a first state when the computer system is powered on and operating, wherein the variable stays in the first state until the computer system is powered off in response to a power-off request, the variable being in a second state when the computer system is powered off in response to a power-off request, wherein the variable stays in the second state until the computer system is powered on and operating”.

In other words, independent claim 22 requires that the state variable assume a particular state only when a specific condition or conditions occur and further requires

that the state variable stay in that state until another specific condition or conditions occur. This claim requires the state variable to assume a first state when the computer system is powered on and operating. In this regard, this claim specifically requires the state variable to remain in the first state until the computer system is powered off in response to a power-off request. This claim also requires the state variable to assume a second state when the computer system is powered off in response to a power-off request. In this regard, this claim specifically require the state variable to remain in the second state until the computer system is powered on and operating.

Contrary to the assertion of the Examiner, these elements of the claimed invention are not disclosed or suggested by the primary reference to Taroda et al. In regard to these elements, the rejection states that Taroda et al teach "the state variable (OFF OK) assuming a first state when the computer is powered on and operating with figure 23, at column 20, lines 27-32 and at column 22, lines 1-8" and "the state variable (OFF OK) assuming a second state when the computer is powered off in response to a power off request at column 20, line 61 - column 21, line 41." Office Action, page 7, lines 11-16. However, the off-permission signal OK OFF in the Taroda et al. patent does not assume and maintain states based on the claimed conditions. Instead, in response to an inquiry to service adapters 36a, 36a' from unit power controllers 39a, 39a', the service adapters 36a, 36a' send off-permission signal OFF OK to the respective unit power controllers 39a, 39a' in a case where notification of write-back completion has been received from the cache function engines 34a, 34a', thereby giving notice of the fact that battery back-up is unnecessary. See, Taroda et al., col. 19, line 66 - col. 20, line 8. If notification of write-back completion has not been received, the service adapters 36a, 36a' do not send the off-permission signal OFF OK, thereby giving notice of the fact that battery back-up is necessary. See, Taroda et al., col. 20, lines 9-12. The unit power controllers 39a, 39a' input to battery unit 39c an off-permission signal OFF OK STATE indicating whether

notification of the fact that battery back-up is unnecessary has been received from the service adapters 36a, 36a'. See, Taroda et al., col. 20, lines 18-26. Clearly, the conditions under which Taroda et al.'s off-permission signal OFF OK is sent or not sent, and Taroda et al.'s off-permission signal OFF OK STATE changes state, are completely different than the claimed conditions.

This deficiency in the primary reference to Taroda et al. is not cured by the IBM TDB or the Mermelstein patent, which are cited for alleged teachings with respect to other elements of the claimed invention.

Moreover, in independent claim 22, the state variable is stored in a non-volatile memory field of an information circuit associated with the computer system's power system. Contrary to the assertion of the Examiner, these elements of the claimed invention are not disclosed or suggested by the primary reference to Taroda et al. In regard to these elements, the rejection states that Taroda et al. teach "an information circuit having a non-volatile memory field for storing a state variable with the memory circuitry of BTU 39c of figure 22 and at column 20, lines 27-32". Office Action, page 7, lines 8-10. Granted, the Taroda et al. patent teaches that battery unit (BTU) 39c stores the off-permission signal OFF OK STATE (on/off). See, Taroda et al., col. 20, lines 27-32. However, the Taroda et al. does not disclose or suggest that battery unit BTU 39 stores its state variable in a non-volatile memory field, much less a non-volatile memory field of an information circuit associated with a computer system's power system as required by independent claim 22.

This additional deficiency in the Taroda et al. patent is not cured by the IBM TDB or the Mermelstein patent, which are cited for alleged teachings with respect to other elements of the claimed invention.

Furthermore, because the Taroda et al. patent, the IBM TDB and the Mermelstein patent, alone and in combination, fail to disclose or suggest the invention as recited in independent claim 22, the Applicants respectfully submit that dependent claim 23-26 (which depend, directly or indirectly, from claim 22) also patentably define over the prior art for at least the reasons discussed above with respect to claim 22.

Also, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the primary reference to Taroda et al. or to combine the reference teachings as suggested by the Examiner. Moreover, there was no reasonable expectation of success in modifying the primary reference to Taroda et al. or combining the reference teachings as suggested by the Examiner. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In this case, neither the teaching/suggestion nor the reasonable expectation of success is found in the prior art. Instead, the Examiner appears to be using forbidden hindsight.

Therefore, the Applicants respectfully request reconsideration and withdrawal of these rejections of claims 22-26 under §103(a).

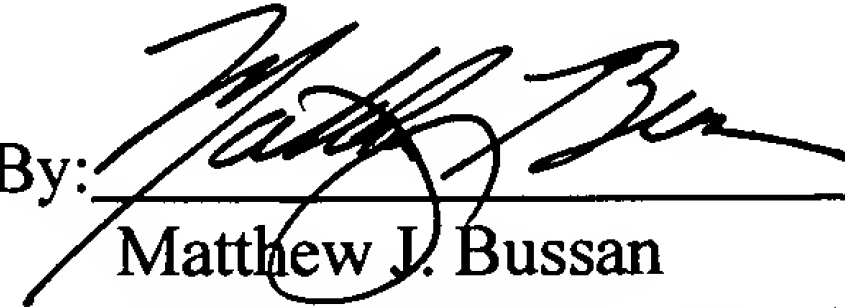
V. Conclusion

In view of the foregoing comments, the Applicants respectfully submit that all of the pending claims (i.e., claims 1-26) are in condition for allowance and that the application should be passed to issue.

PATENT - AMENDMENT

If a conference would be of value in expediting the prosecution of this application, the Examiner is hereby invited to telephone the undersigned counsel at (847) 462-1937 to arrange for such a conference.

Respectfully submitted,

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